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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,836	03/29/2004	Masatsugu Ishiba	06699.0003-00	9968

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EXAMINER

HOLZEN, STEPHEN A

ART UNIT	PAPER NUMBER
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3644

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,836

Applicant(s)

ISHIBA, MASATSUGU

Examiner

Stephen A. Holzen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 13 is/are rejected.
- 7) ☒ Claim(s) 3 and 5-12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/29/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Corcoran (6,371,406) in view of ordinary skill in the art. Corcoran discloses an airframe (#102) having a propulsion device (#40,50,60,70,80), and a sidewall (airframe #102) surrounding the propulsion device, an air intake port (#32) having a plurality of divided air intake port sections (see Figure 1) formed on said side wall surface of said airframe (see Figure 1), a duct (duct connects the air intake port and accumulator #40 via the duct illustrated in Figure 1) connecting said air intake port section and said propulsion device with one another, a plurality of shutter parts (#152) each provided at a corresponding one of said air intake port sections for adjusting amount of air flowing therein and a control unit for adjusting the degree of opening of each of said shutter parts in accordance with an operations (see Col. 3, lines 20-25). Corcoran further teaches that his aircraft has an autopilot. (see Figure 13; #1320).

Corcoran discloses every aspect of the present invention except wherein the shutters are controlled by a control stick. However it is well known in the art to control a plane manually with manual (control stick) controls or via an autopilot. Manual controls provide a pilot the opportunity to manually override an autopilot, in the case where the autopilot is malfunctioning. It would have been obvious to one having ordinary skill in

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the art at the time the invention was made to use a control stick in a manual pilot operation for the reason of increasing the safety of an aircraft, in the case where the autopilot is not operating properly.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ouellette et al in view of ordinary skill in the art and further in view of Farley et al. (6,076,767).

Ouellette discloses an airframe (see Figure 15), having a propulsion device (#218, 220) for generating propulsive force in a vertically upward direction (see Figure 15), an air intake port (top of #148; #150 & #152 co-operate to open, thus creating an intake), a duct part connecting said air intake port section and said propulsion device to one another (#148 creates a duct connecting the intake to the pulse jet), a plurality of plates (#150) having an airfoil cross section (while Ouellette only disclose a flat plate, it should be appreciated that an airfoil *can* be flat and does not necessarily require a curved contoured shape) each provided at a corresponding one of said air intake port sections for adjusting an amount of air flowing therein (#150, and #152 cooperate at the top of Figure 14 to create a movable cowl that can adjust the amount of airflow), a plurality of support members for rotatably supporting the cowl (cowl rests on a hinge #152 on one end, and on the side walls #224 on other), and actuators and a control unit for driving the cowl (see ¶0055, lines 8-10). Ouellette et al does not disclose either a "pair" of actuators or "a control stick".

However it is well known in the art to control an airplane manually with manual (control stick) controls or via an autopilot. Manual controls provide a pilot the

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opportunity to manually override an autopilot, in the case where the autopilot is malfunctioning. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a control stick in a manual pilot operation for the reason of increasing the safety of an aircraft, in the case where the autopilot is not operating properly.

Ouellette as applied above discloses every aspect of the invention except wherein the actuators are provided in "pairs". Farley et al however discloses that it is well known in the art to provide actuators in pairs to drive both ends of the corresponding plates (control surfaces 2-5) for the purpose of redundancy. It would have been obvious to one having ordinary skill in art to use a pair of actuators to alter the tilt angle of the plates for the purpose of increased reliability of the operating system.

4. Claim 4/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Corcoran and further in view of Otsuka (5,765,778). Corcoran discloses every aspect of the present invention thus far, however does not disclose the limitations of claim 4.

Claim 4/2 is rejected under 35 U.S.C 103(a) as being unpatentable over Ouellette et al as defined above and further in view of Otsuka. Ouellette et al discloses every aspect of the present invention thus far, however does not disclose the limitations of claim 4.

Otsuka discloses a landing airbag on the underside of an airframe (#6), a gas generator for generating a high pressure gas which is to be supplied to said landing airbag so as to inflate it (see Col. 5, line 5 "high pressure air bomb"), a valve for

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controlling said high pressure gas to be supplied from said gas generator to said landing airbag (the operation of a "gas bomb" necessarily has a valve structure to inflate the airbag), a sensor and control unit that controls the valve based on the sensor's output, to supply said high pressure gas to said landing airbag. (see Col. 5, lines 5 and Col. 5, lines 35-37).

It would have been obvious at the time of the invention to one having ordinary skill in the art to employ the teachings of Otsuka into the inventions of Corcoran and Ouellette for the purpose of increasing passenger and aircraft safety.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Corcoran as applied to claim 1 above, and further in view of Ando (4,004,760). Corcoran does not disclose an air intake port section covered with a net member.

Claim 13 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ouellette as applied to claim 2 above, and further in view of Ando. Ouellette does not disclose an air intake port section covered with a net member.

Ando et al discloses that it is well known in the art to use a "net member" (see Figure 2 and 3) to prevent stones or birds from being sucked into an air intake. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the mesh netting of Ando et al in the aircrafts of Corcoran and Ouellette for the purpose increasing passenger/aircraft safety.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Initially it should be noted that the prior art does not read on the functional language found in this claim. However, the function language itself cannot be considered as allowable subject matter at this time because it is unclear what limitations the functional language imparts. If the applicant were to re-write the claim in "Means plus function" language, the functional language would clearly impart structural and the examiner would consider the case in condition for allowance.

Allowable Subject Matter

7. Claims 3,5-7 and 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

Re – Claim 3: The prior art does not disclose the combination of claims 1 or 2 and an annular storage member surrounding a pilot and an airbag received therein

Re – Claim 5, 6: the prior art does not disclose the combination of a rotatable fuel tank and the structure of claims 1 or 2.

Re – Claim 7: The prior art does not disclose the combination of a plurality of turbines each attached to an inner side of a wheel and adapted to be rotated by a gas supplied thereto to drive the wheels to rotate.

Re – Claims 9, 10, 11, 12: The prior art does not disclose the a propeller and turbine coupled together whereby the turbine drives the propeller to generate the propulsive force, in combination with the limitations found in claim 1 or 2.

Re – Claim 8: The prior art does not disclose a means for causing the aircraft to go up and down while being forced to approach a vertical wall existing outwardly of said airframe, wherein the wheels project in a disclose direction of said airframes and are in contact with a wall.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen A. Holzen whose telephone number is 703-308-2484. The examiner can normally be reached on M-F 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 703 305-7421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Teri Pham Luu', with a stylized flourish at the end.

TERI PHAM LUU
SUPERVISORY
PRIMARY EXAMINER